plication No.	Applicant(s)
627,043	TAYLOR ET AL.
	Art Unit
Vannucci	2828
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<u>6, 2005</u> .	
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n received. n received in Application No ents have been received in the scommunication to file a report of this application.  Note the attached EXAMINI ason(s) why the oath or declar submitted.  Patent Drawing Review (Prediction of the declar of the second of the submitted)  Patent Drawing Review (Prediction of the declar of the second	nis national stage application from the ply complying with the requirements  ER'S AMENDMENT or NOTICE OF aration is deficient.  FO-948) attached  e Office action of awings in the front (not the back) of 21(d).  L must be submitted. Note the
TE OF C III	REMAINS) CLOSED in this ther appropriate communicates. This application is subject MPEP 1308.  6, 2005.  niner.  35 U.S.C. § 119(a)-(d) or (f).  n received. n received in Application Notents have been received in the first application.  Note the attached EXAMIN ason(s) why the oath or decletes submitted.  Patent Drawing Review (Piendment / Comment or in the pader according to 37 CFR 1.1 of BIOLOGICAL MATERIA

U.S. Patent and Trademark Office PTOL-37 (Rev. 1-04) PRIMARY EXAMINER

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## **DETAILED ACTION**

## Allowable Subject Matter

- 1. Claims 1, 3-30 and 32-59 are allowed.
- 2. The following is an examiner's statement of reasons for allowance.

The limitations that are primarily responsible for distinguishing the claims of this application over the prior art are the limitations concerning an array of thyristor devices and corresponding resonant cavities adapted to process different wavelengths of light wherein said multilayer structure includes a top contact layer, a substructure formed above said top contact layer, and a top mirror formed above said substructure where portions of said substructure are selectively removed to provide said resonant cavities with different vertical dimensions that correspond to said different wavelengths as recited in independent claims 1 and 30.

Examiner also agrees with applicant's arguments presented in the amendment received on May 6, 2005.

The inventions recited in independent claims 1 and 30 were not found in the prior art. While the limitations recited in the claims of this application are found in various prior art references, combining these prior art references to form the recited inventions is not proper and would only be the result of hindsight reasoning.

The following patents represent examples of the analogous prior art. Lemoff et al.(6,259,121) does not disclose a thyristor array or a top contact layer positioned as recited, Kosaka(5,293,393) does not disclose resonant cavities with different vertical

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lengths corresponding to different wavelengths or a top contact layer positioned as recited, and Bryan et al.(5,625,636) does not disclose cavities adapted to process different wavelengths of light or a top contact layer as recited.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Correspondence

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Jim Vannucci whose phone number is (571) 272-1820.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center whose telephone number is (703) 308-0956.

Papers related to Technology Center 2800 applications only may be submitted to Technology Center 2800 by facsimile transmission. Any transmission not to be considered an official response must be clearly marked "DRAFT". The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Technology Center Fax Center number is (703) 872-9306.

James Vannucci

James Vannucci

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